

Name: _____

Unit: _____

Cadet Music Theory Workbook

Level Three

Updated 7 Oct 2019

Level 3

Transposing a Melody

17. Transposition generally means a change of key. It is often used in songs to accommodate the range of a singer's voice or an instrument's range. The word can also mean a change of clef without necessarily meaning a change of key.
18. At this stage, you will only transpose melodies an octave higher or an octave lower.
19. To transpose an octave higher, you must rewrite the melody where each note is raised by an octave – eighth notes.

Original Melody



Transposed an octave higher



20. When transposing up or down, the following steps should be followed:
 - 1) The clef, key signature, and time signature must always be written correctly.
 - 2) The stems of the notes must be placed in the proper direction.

Note: *The names of the notes must remain identical in the transposition.*

- 3) The notes of the melody must always be exactly an octave apart.
- 4) All accidentals and alterations must be written in.
- 5) The melody remains in the same key.

21. When transposing an octave lower the same procedure follows but each note is lowered by an octave.

e.g.

Original melody

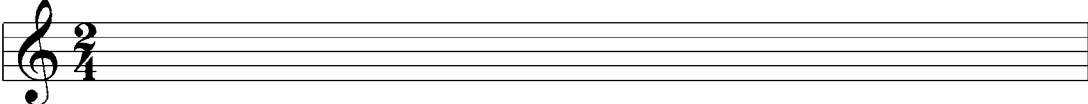


Transposed an octave lower

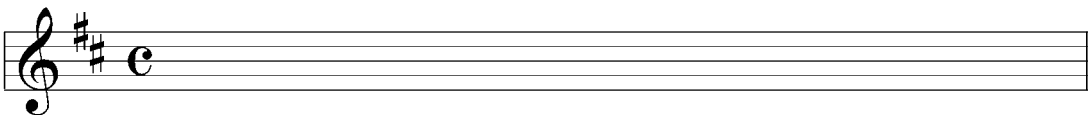


A) Transpose the following two melodies an octave higher.

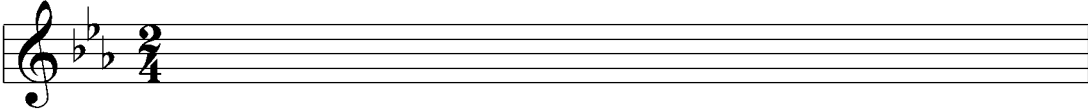
1) 



2) 



B) Transpose the following melody an octave lower.



To Find the Key of a Given Melody

10. Each musical piece is written in a key. This key is determined by what is found in the key signature. Each key is determined by a grouping of sharps or flats written at the beginning of the musical piece. This key signature makes it unnecessary to write repeated accidentals throughout the music.
11. Given the key signature and a melody, the music may be written in either the major or minor key.
12. Apart from the key signature, there are other reference points that could help in determining the key of a musical piece. Firstly, the last note of the piece is usually the tonic of the key used. Secondly, a melody in a minor key will usually contain an accidental beside the raised seventh.

ATTENTION: Do not forget that this note is altered a semitone higher than what is normally found in the major scale.

Let's observe the following excerpts:



The first melody has no accidentals except those which belong to the diatonic major scale of G. It also ends on the tonic.



In the second melody, not only do we find the key signature of one sharp, but we find a D# which is the leading note of E minor. This melody also ends on the tonic.

A) State the key of each melody:

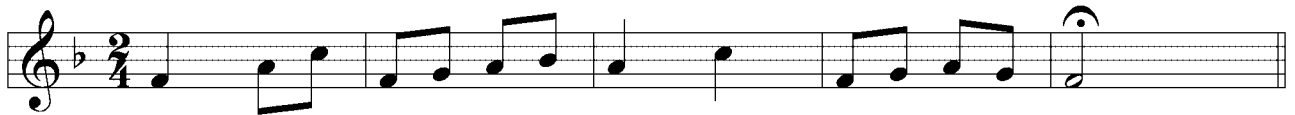
1)



2)



3)



4)



Intervals

- As you studied in Level Two, an interval is the distance of pitch between two notes. We also studied the specific names for the size (2nd, 3rd, 4th, etc.) and quality (major, minor) of each interval.
- Notice that the unison, fourth, fifth, and octave are called PERFECT, but the second, third, sixth, and seventh, can be called MAJOR or MINOR. All intervals are named, as the lower note is, for the moment, the TONIC.

| Perfect | Major or Minor |
|--------------|----------------|
| unison | second (2nd) |
| fourth (4th) | third (3rd) |
| fifth (5th) | sixth (6th) |
| octave (8ve) | seventh (7th) |

- To determine the nature of each interval, we can use the major scale as a reference point, because all intervals are perfect or major depending on the type of interval.

A musical staff in treble clef showing intervals from unison to octave. The notes are: C (unison), C and D (Major second), C and E (Major third), C and F (Perfect fourth), C and G (Perfect fifth), C and A (Major sixth), C and B (Major seventh), and C and C' (Perfect octave).

| | | | | | | | |
|----------------|--------------|-------------|----------------|---------------|-------------|---------------|----------------|
| Perfect unison | Major second | Major third | Perfect fourth | Perfect fifth | Major sixth | Major seventh | Perfect octave |
|----------------|--------------|-------------|----------------|---------------|-------------|---------------|----------------|

- The word AUGMENTED means “made larger”. When a perfect or major interval is made larger by a half step or semitone, it becomes an Augmented Interval.
- The word DIMINISHED means “made smaller”. When a perfect or minor interval is made smaller by a half step, it becomes a Diminished Interval.

A musical staff in bass clef showing augmented and diminished intervals. The intervals are: Diminished (C and Bb), Augmented (C and C#), and Diminished (C and B).

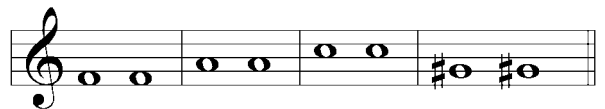
| | | |
|------------|-----------|------------|
| Diminished | Augmented | Diminished |
|------------|-----------|------------|

9. To simplify the terms minor, augmented, etc., they can be written as outlined in the chart below. Either method is acceptable but remember to stick to one or you may become confused.

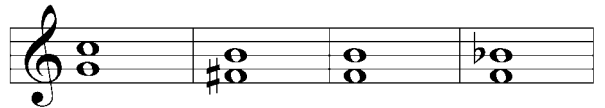
| | | |
|------------|-----|---|
| Major | M | + |
| Minor | m | - |
| Augmented | aug | x |
| Diminished | dim | o |

10. After having been able to qualify the second [redacted] intervals in Level Two, you will now learn how each perfect interval is composed (unison, 4th, 5th, 8ve).

Unison: Two notes or more of the same sound is a Unison.



Fourth: All notes that have the same accidentals (# to #) are perfect except F and B and their derivatives (F# and B#, etc).



perfect perfect aug. perfect

To obtain a perfect fourth between these two notes, the interval has to have a F# and a B or an F and a Bb. As mentioned above, if the interval is a semitone larger, it becomes augmented. If the interval is a semitone smaller, it becomes diminished (4th = 2 1/2 tones)



aug. perfect dim. perfect

Fifth: The same rule applies with this interval as the fourth (5th = 3 1/2 tones)



perfect perfect aug. perfect



aug. dim. perfect perfect

B) Identify and name the following intervals:

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____

15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____

22 _____ 23 _____ 24 _____ 25 _____ 26 _____ 27 _____ 28 _____

C) Complete the following intervals:

Perfect 4th Perfect 5th Major 3rd Minor 3rd Major 3rd Perfect 5th Major 3rd

Perfect 8ve Major 3rd Major 2nd Major 3rd Dim. 5th Major 3rd Perfect 8ve

Aug. 4th Major 3rd Minor 3rd Major 2nd Minor 3rd Minor 2nd Perfect 5th

Melodic Minor Scales

12. minor scales come in three forms: the natural minor, the harmonic minor, and the melodic minor scales. We have seen the first two scales, now it is time to study the third - the **MELODIC MINOR SCALE**.

13. You remember that to find the tonic of the relative minor scale, you either take the sixth scale degree of the major scale or take the tonic and move backwards three semitones.

C Major

Tonic of the relative
minor scale

I II III IV V **VI** VII VIII
or I

14. Taking this new note as tonic, you create another scale (a series of 8 adjacent notes) and you keep the key signature of the major scale.

A minor

I II III IV V VI VII **VIII**
or I

15. To find a melodic minor scale from the natural minor, you have to raise the VI and VII scale degrees a semitone higher when ascending and then lower them a semitone when descending returning them to their natural state according to the key signature.

A melodic minor

I II III IV V VI VII I

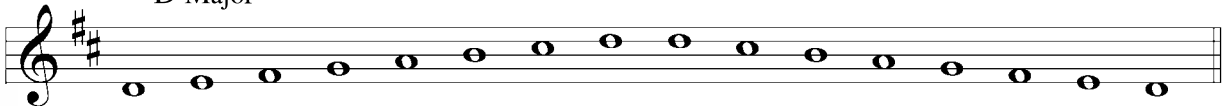
In another key Relative minor scale of F Major

D melodic minor

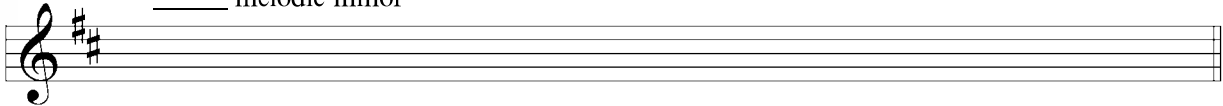
I II III IV V VI VII I

A) Construct the melodic minor scale of the following major scales (ascending and descending).

D Major




_____ melodic minor

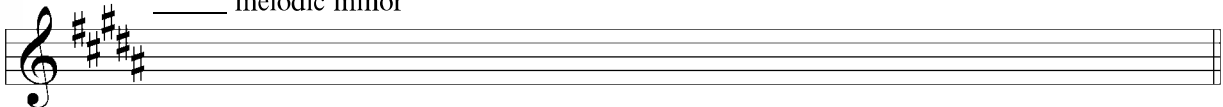


Detailed description: This block shows the D Major scale on a treble clef staff. The key signature has two sharps (F# and C#). The scale is written as a sequence of eight quarter notes: D4, E4, F#4, G4, A4, B4, C#5, D5. Below the staff is a blank treble clef staff with the same key signature, intended for the student to write the corresponding melodic minor scale.

B Major

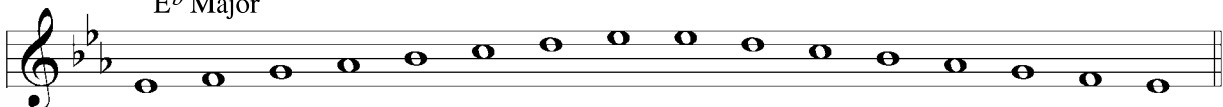


_____ melodic minor

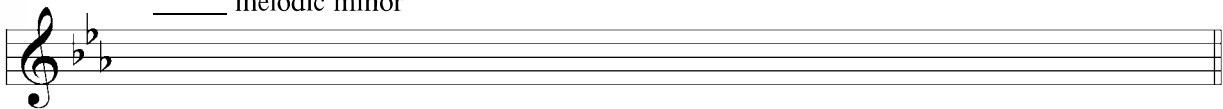


Detailed description: This block shows the B Major scale on a treble clef staff. The key signature has three sharps (F#, C#, and G#). The scale is written as a sequence of eight quarter notes: B3, C#4, D4, E4, F#4, G#4, A5, B5. Below the staff is a blank treble clef staff with the same key signature, intended for the student to write the corresponding melodic minor scale.

E^b Major

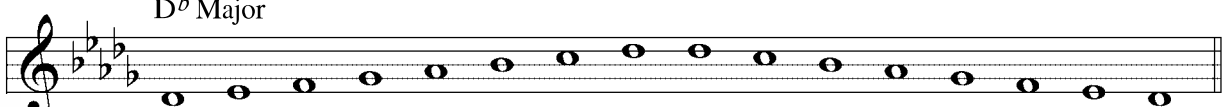


_____ melodic minor

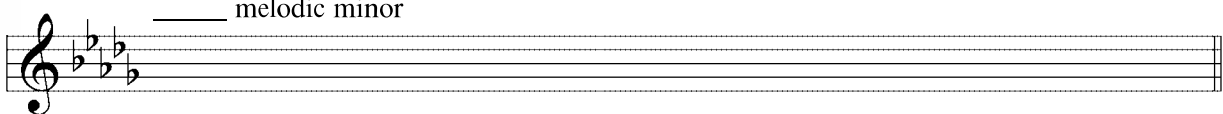


Detailed description: This block shows the E-flat Major scale on a treble clef staff. The key signature has three flats (Bb, Eb, and Ab). The scale is written as a sequence of eight quarter notes: E3, F3, G3, Ab3, Bb3, C4, D4, E4. Below the staff is a blank treble clef staff with the same key signature, intended for the student to write the corresponding melodic minor scale.

D^b Major

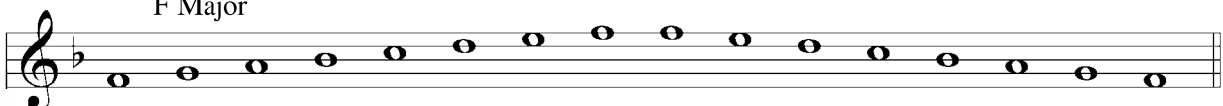


_____ melodic minor

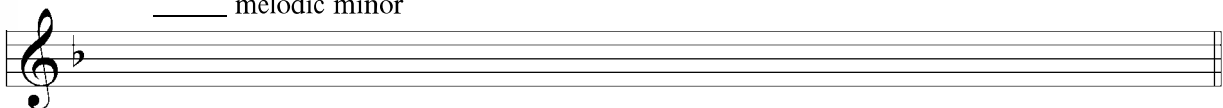


Detailed description: This block shows the D-flat Major scale on a treble clef staff. The key signature has four flats (Bb, Eb, Ab, and Db). The scale is written as a sequence of eight quarter notes: D3, Eb3, F3, G3, Ab3, Bb3, C4, D4. Below the staff is a blank treble clef staff with the same key signature, intended for the student to write the corresponding melodic minor scale.

F Major



_____ melodic minor



Detailed description: This block shows the F Major scale on a treble clef staff. The key signature has one flat (Bb). The scale is written as a sequence of eight quarter notes: F3, G3, A3, Bb3, C4, D4, E4, F4. Below the staff is a blank treble clef staff with the same key signature, intended for the student to write the corresponding melodic minor scale.

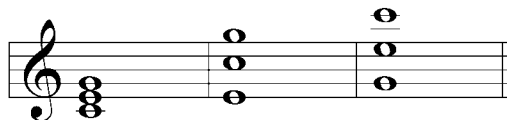
Three-Note Chords

16. A chord is the name given to any three or more notes sounded simultaneously. The most basic chord is a TRIAD, that is, three sounds built up in thirds.



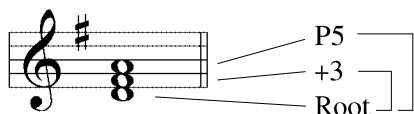
17. These triads may be built on each degree of major and minor scales. The note that they are built on, that is, the lowest note, is called the ROOT (C – of the C major scale) of the triad. The next note is a diatonic third above the root and it is named the THIRD (E), and the third sound is a diatonic fifth above the same root called the FIFTH (G).

18. No matter how the notes are placed on the staff, the chord remains the same. For example, these three chords (below) all belong to the chord of C major.



Major Chord or Minor Triads

19. A major perfect chord is composed of a root, a major third, and a perfect fifth. A minor chord is composed of a root, a minor third, and a perfect fifth.



20. You can therefore state that it is the nature of the third that will determine if the chord is major or minor. On the other hand, the perfect fifth belongs to both chords. Examine the following examples of the major and minor chords.

A musical staff in treble clef showing ten triads. The key signature changes for each triad. The triads are: C# min, F maj, E min, B min, A min, A maj, E maj, G min, F min, and Bb maj. Each triad is labeled below the staff.

C# min F maj E min B min A min A maj E maj G min F min B^b maj

A) Name the following chords (major or minor)

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____

15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____

B) Compose the following chords

major major minor minor major minor major

minor major minor major minor major minor

minor major minor minor major major minor

Tempo and Style

21. Throughout your musical training, you will have to recognize and understand new Italian words that you will frequently find in musical pieces. These terms are the composer's way of expressing the interpretation of the musical piece. Certain words correspond to tempo, variation of tempo, and style, et
22. The following are words that you might find in a musical piece at your level.

Variation in Tempo

| Italian | English |
|------------|------------------------|
| piu mosso | more movement, quicker |
| meno mosso | less movement, slower |

Style

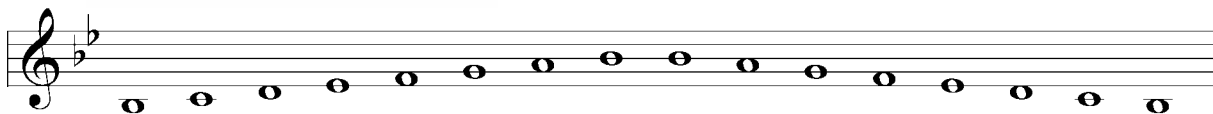
| Italian | English |
|------------|-------------------------|
| animato | animated |
| con moto | with motion |
| espressivo | expressively |
| leggiero | light and graceful |
| maestoso | majestically, dignified |
| tranquillo | tranquil |

Adverbs used in conjunction with other words

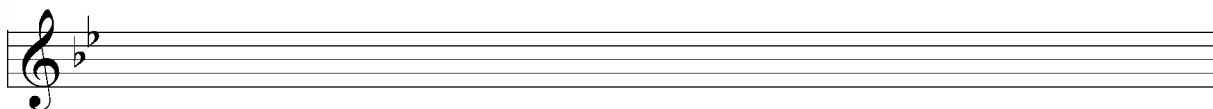
| Italian | English |
|------------|--------------|
| non troppo | not too much |
| troppo | too much |
| molto | very much |
| simile | the same |

D) Construct a melodic minor scale from its relative major (ascending and descending)

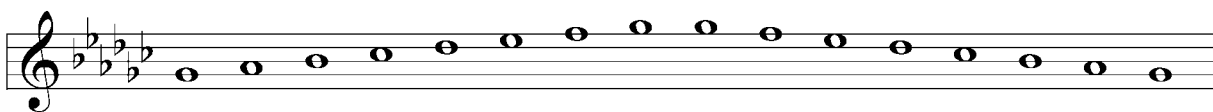
B \flat major



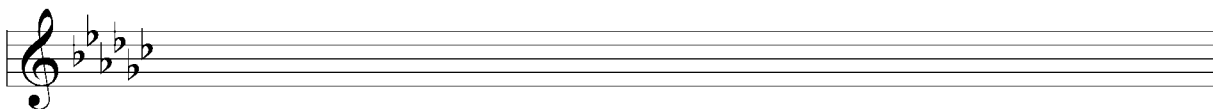
_____ harmonic minor



G \flat major



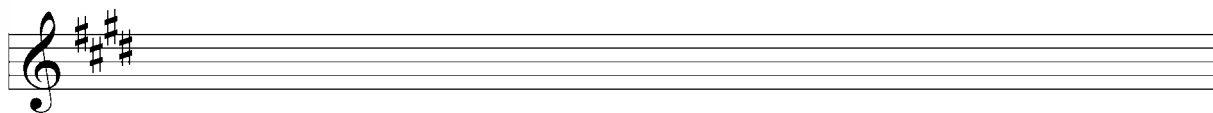
_____ melodic minor



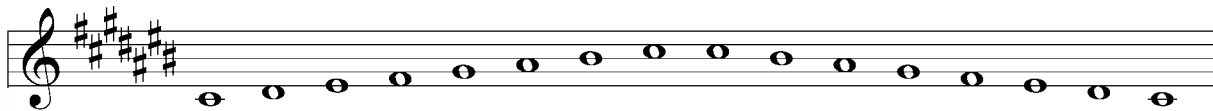
E major



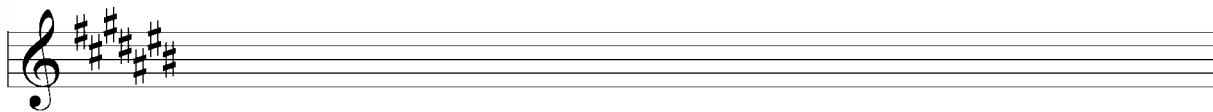
_____ melodic minor



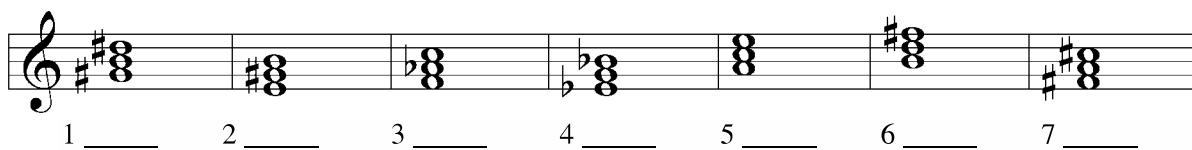
C \sharp major



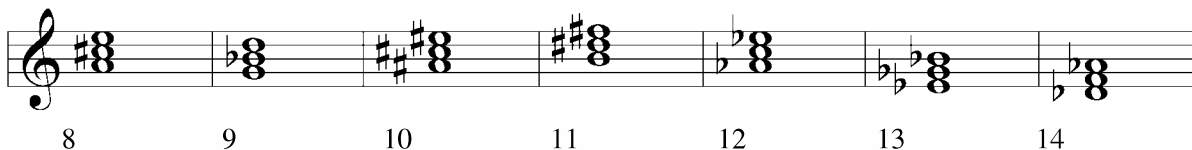
_____ melodic minor



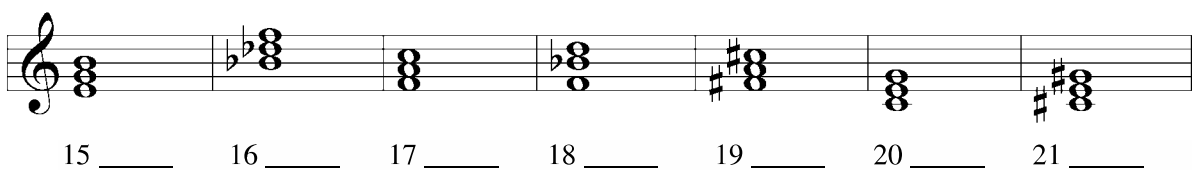
E) Name and identify the following chords:



1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____



8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____



15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____

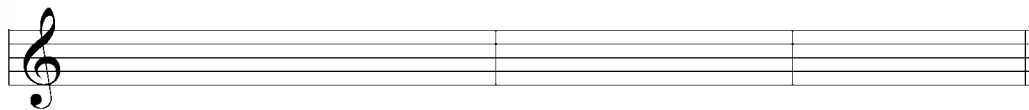
G) Match the word with its definition:

- | | |
|------------|--------------------|
| Animato | expressively |
| Simile | not too much |
| Maestoso | with spirit |
| Non troppo | same |
| Tranquillo | less movement |
| Piu mosso | very much |
| Meno mosso | more movement |
| Molto | with motion |
| Con moto | tranquil |
| Espressivo | too much |
| Leggiero | light and graceful |
| Troppo | majestically |

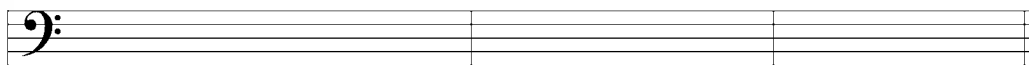
.. Complete the following measures by using one note or rest.



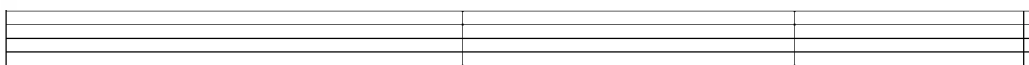
I) Transpose this melody one octave higher



J) Transpose this melody one octave lower



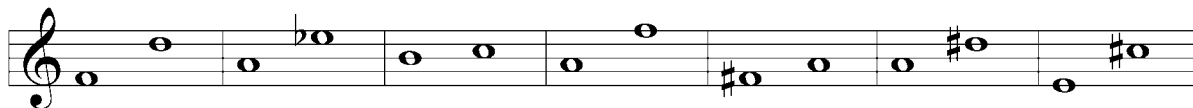
K) Transpose this melody an octave higher. Use the appropriate clef.



C) Name the following intervals:



1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____



8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____

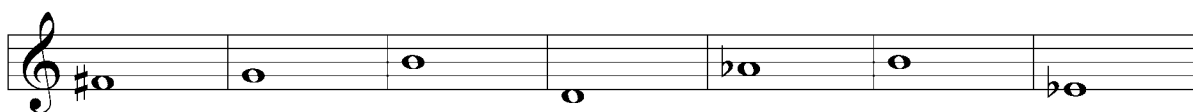


15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____



22 _____ 23 _____ 24 _____ 25 _____ 26 _____ 27 _____ 28 _____

D) Find the upper note needed to create the following intervals:



Perfect 5th Minor 6th Major 3rd Major 7th Minor 2nd Perfect 4th Minor 7th



Major 2nd Major 6th Aug. 4th Minor 3rd Dim. 5th Minor 7th Minor 6th

E) Find the lower note needed to create the following intervals:



Minor 6th Minor 2nd Perfect 5th Minor 7th Perfect 4th Minor 3rd Dim. 5th



Major 7th Major 3rd Minor 6th Major 2nd Minor 7th Aug. 4th Major 6th